

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A fuel cell system comprising:

a fuel cell having an anode space and a cathode space, which are separated from one another by a proton-conducting membrane;

a cathode feed line for feeding oxygen-containing gas to the cathode space;

a cathode exhaust-gas line;

an anode line for feeding and discharging an operating medium to the anode-space inlet and from the anode-space outlet;

~~a device for determining a temperature; and~~

a device for metering and feeding said operating medium to the cathode space as a function of the determined temperature; and [[.]]

a control unit coupled to control operation of said device for metering and feeding said operating medium, said control unit being programmed to continue operation of said device for metering and feeding said medium as a function of the determined temperature, for a predetermined time period after the fuel cell system is switched off until a uniform operating medium concentration has been achieved in the fuel cell system.

Claim 2. (Currently Amended) ~~The fuel cell system according to Claim 1;~~ A fuel cell system comprising:

a fuel cell having an anode space and a cathode space, which are separated from one another by a proton-conducting membrane;

a cathode feed line for feeding oxygen-containing gas to the cathode space;

a cathode exhaust-gas line;

an anode line for feeding and discharging an operating medium to the anode-space inlet and from the anode-space outlet;

a device for determining a temperature; and

a device for metering and feeding operating medium to the cathode space as a function of the determined temperature;

wherein the device for metering and feeding operating medium is connected to the cathode feed line, to introduce operating medium into the cathode feed line.

Claim 3. (Currently Amended) ~~The fuel cell system according to Claim 1,~~ A fuel cell system comprising:

a fuel cell having an anode space and a cathode space, which are separated from one another by a proton-conducting membrane;

a cathode feed line for feeding oxygen-containing gas to the cathode space;

a cathode exhaust-gas line;

an anode line for feeding and discharging an operating medium to the anode-space inlet and from the anode-space-outlet;

a device for determining a temperature; and

a device for metering and feeding operating medium to the cathode space as a function of the determined temperature;

wherein the device for metering and feeding operating medium is connected between the anode line and ~~one of the cathode feed line and the cathode space~~, to introduce operating medium from the anode line therein.

Claims 4.-5. (Cancelled.)

Claim 6. (Currently Amended) ~~The fuel cell system according to Claim 1,~~ A fuel cell system comprising:

a fuel cell having an anode space and a cathode space, which are separated from one another by a proton-conducting membrane;

a cathode feed line for feeding oxygen-containing gas to the cathode space;

a cathode exhaust-gas line;

an anode line for feeding and discharging an operating medium to the anode-space inlet and from the anode-space outlet;

a device for determining a temperature; and

a device for metering and feeding operating medium to the cathode space as a function of the determined temperature;

wherein the device for determining the temperature comprises a sensor for recording one of the ambient temperature and the temperature in the interior of the anode line.

Claim 7. (Currently Amended) ~~The fuel cell system according to Claim 1,~~ A fuel cell system comprising:

a fuel cell having an anode space and a cathode space, which are separated from one another by a proton-conducting membrane;

a cathode feed line for feeding oxygen-containing gas to the cathode space;

a cathode exhaust-gas line;

an anode line for feeding and discharging an operating medium to the anode-space inlet and from the anode-space outlet;

a device for determining a temperature; and

a device for metering and feeding operating medium to the cathode space as a function of the determined temperature;

wherein the device for determining the temperature comprises a sensor for recording the temperature of one of the cathode space, the interior of the cathode feed line and the interior of the cathode discharge line.

Claims 8. (Withdrawn) A method for operating a fuel cell system having a fuel cell with an anode space and a cathode space that are separated from one another by a proton-conducting membrane, the cathode space being acted on by an oxygen-containing gas via a cathode feed line, and an operating medium being passed through the anode space by means of an anode line, said method comprising:

determining one of ambient temperature and temperature in an interior of one of the anode line, of the cathode space, the cathode feed line, or cathode exhaust-gas line; and

feeding operating medium in metered quantities to the cathode space as a function of the determined temperature.

Claim 9. (Withdrawn) The method according to Claim 8, wherein the operating medium is fed to the cathode space via the cathode feed line.

Claim 10. (Withdrawn) The method according to Claim 8, wherein operating medium is fed to the cathode space from the anode line.

Claim 11. (Withdrawn) The method according to Claim 8, wherein the operating medium is introduced directly into the cathode space.

Claim 12. (Withdrawn) The method according to Claim 8, further comprising:

comparing the determined temperature with a predetermined temperature threshold; and

if the determined temperature falls below the temperature threshold, feeding operating medium to the cathode space.

Claim 13. (Withdrawn) The method according to Claim 8, further comprising:

comparing the determined temperature with a predetermined temperature threshold; and

if the determined temperature falls below the temperature threshold, increasing the concentration of the operating medium fed to the cathode space is increased.

Claim 14. (Withdrawn) The method according to Claim 8, wherein the temperature is determined when the fuel cell system is switched off.